

PIEZOELECTRIC DEVICE FOR INJECTOR

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ABSTRACT OF THE DISCLOSURE

10 A piezoelectric device 1 for an injector, built into
an injector and generating driving force of the injector,
wherein a relation $d(0.1E_c)/d(1.2E_c) \geq 0.50$ is
established between an apparent piezoelectric constant
15 $d(1.2E_c)$ calculated from static elongation when an
electric field of 1.2 E_c is applied to the piezoelectric
device in the same direction as a polarizing direction
while a preset load of 500 N is applied to the
piezoelectric device, and an apparent piezoelectric
constant $d(0.1E_c)$ calculated from static elongation when
20 an electric field of 0.1 E_c is applied to the
piezoelectric device in the same direction as the
polarizing direction. The piezoelectric device so
fabricated has high durability and can be used for a long
time. The piezoelectric device 1 is fabricated by
alternately laminating a plurality of piezoelectric
25 layers expanding and contracting in proportion to an
applied voltage and a plurality of internal electrode
layers for supplying the applied voltage, and the
sectional shape of the piezoelectric device crossing at
right angles the laminating direction is partially or
wholly arcuate. The piezoelectric device 1 is
30 accommodated in a cylindrical accommodation space.